



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,054	07/21/2006	Johannes H Korst	US030004US	6085
24737 7590 12/19/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
WONG, KIN C				
ART UNIT		PAPER NUMBER		
2627				
MAIL DATE		DELIVERY MODE		
12/19/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/541,054

Applicant(s)

KORST ET AL.

Examiner

K. Wong

Art Unit

2627

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6-11 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,7,11 and 14 is/are rejected.
- 7) ☒ Claim(s) 8-10 and 15-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: _____

This is a response to amendment filed 9/29/08.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims (1, 4, 6-7 and 14) are rejected under 35 U.S.C. 103(a) as being unpatentable over Shitara et al (5778420) in view of Mizuyabu et al (7114086).

Regarding claims 1 and 11: Shitara et al discloses a battery powered device (col. 1, lines 8-10 of Shitara et al) including:

a disk memory (as depicted in figure 2A of Shitara et al and see associated descriptions for details);

a means for rotating the disk memory;

a read/write means for at least one of reading and writing streaming data from or to the disk memory;

a buffer memory for storing data read from or to be written to the disk memory, the buffer memory including a plurality of buffer memories associated with a corresponding one of the streaming data allowing concurrent reading and writing, wherein at least one buffer memory buffers data to be written and at least one buffer memory buffers data that has been read, the plurality of buffer memories being chosen

proportional to a maximum bit rate associated with the corresponding streaming data (col. 12, lines 20-30 and col. 16, lines 10-60 of Shitara et al),

monitoring the buffer memory to determine how long before each of the at least one memory buffer performing a write function is full and to determined how long before each of the at least one of memory buffer memory performing a read function is empty (col. 8, lines 28-48 of Shitara et al);

adjusting scheduled disk starting and stopping times in accordance with the monitored fullness of each of the plurality of the buffer memories, wherein the adjusting includes at least one of a time based reordering a refilling and emptying of each of the plurality of buffers to remove gaps between filling the memory buffers (col. 12, lines 20-38 of Shitara et al); and

controlling the disk memory rotating means in accordance with the adjusted schedule (col. 9, line 63 to col. 10, line 4 of Shitara et al). However, Shitara et al is silent on the energy saving scheduling. Mizuyabu et al is relied on for the teaching of energy saving scheduling (see abstract).

It would have being obvious to one of ordinary skill in the art at the time of the invention was made to modify the buffer scheduling of Shitara with the power management as taught by Mizuyabu et al. The rationale is as follows: one of ordinary skill in the art would have motivated to provide a power conservation management as suggested in col. 1, lines 46-58 of Mizuyabu et al.

Regarding claim 4: the combination of Shitara et al and Mizuyabu et al teaches that further including a Back-Front-Back scheduling process to reorder a

refilling/emptying of various buffers and to remove gaps between buffer memory filling intervals (col. 12, lines 20-38 of Shitara et al).

Regarding claim 6: the combination of Shitara et al and Mizuyabu et al depicts (in figures 7 and 14 of Shitara et al and see associated descriptions for details) that further including: a system means for controlling access to the memory means; a means for user input/output, in communication with the controller means; a means for coherently storing/reading the streams to/from the storage means, in communication with the controller means.

Regarding claims 7 and 14: the combination of Shitara et al and Mizuyabu et al teaches that wherein the buffer memory is partitioned into n buffers for n data streams (col. 4, lines 30-61 of Shitara et al).

Allowable Subject Matter

Claims (8-10 and 15-22) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 9/29/08 have been fully considered but they are not fully persuasive because the arguments are directed to the newly amended claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Wong whose telephone number is (571) 272-7566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 2627

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. Wong/
Primary Examiner
Art Unit 2627

kw

16 Dec 08